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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/706,741

11/12/2003

Richard E. Wahler

5707-04500

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7590

05/08/2006

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EXAMINER

AUVE, GLENN ALLEN

ART UNIT

PAPER NUMBER

2111

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/706,741

Applicant(s)

WAHLER, RICHARD E.

Examiner

Glenn A. Auve

Art Unit

2111

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10, 11, 16 and 20 is/are rejected.
- 7) ☒ Claim(s) 5-9, 12-15, 17-19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4,10,11,16, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Lai, U.S. Pat. No. 5,734,911 (previously cited).

After reviewing the references of record in the case it appear that the Lai reference is applicable to the claims, and a rejection based on it follows.

As per claim 1, Lai shows a method for handling an interrupt, the method comprising: receiving an interrupt request corresponding to a particular interrupt; upon receiving the interrupt request, substituting a vector corresponding to a group of interrupts with a vector corresponding to the particular interrupt, wherein said substituting does not require performing a polling operation; and jumping to a service routine corresponding to the particular interrupt responsive to said substituting (fig.2C and col.2, lines 39-47). Lai shows all of the elements recited in claim 1.

As for claim 2, the argument for claim 1 applies. Lai also shows obtaining the vector corresponding to the particular interrupt from a lookup table (fig.2C). Lai shows all of the elements recited in claim 2.

As for claim 3, the argument for claim 2 applies. Lai also shows that the vectors corresponding to a group of interrupts and the particular interrupt are addresses (col.2). Lai shows all of the elements recited in claim 3.

As for claim 4, the argument for claim 3 applies. Lai also shows that the lookup table includes an address corresponding to the group of interrupts and a plurality of addresses each corresponding to one of a plurality of particular interrupts, and wherein each of the plurality of particular interrupts has a corresponding service routine (fig. 2C and col.2). Lai shows all of the elements recited in claim 4.

As for claim 10, the argument for claim 1 applies. Lai also shows executing the service routine responsive to said jumping (col.2). Lai shows all of the elements recited in claim 10.

As per claim 11, Lai shows a processor comprising: an interrupt source register, wherein the interrupt source register configured to store a plurality of bits including a first bit corresponding to a particular interrupt, wherein the first bit is set responsive to receiving an interrupt request; and a read-only memory (ROM), wherein the ROM is configured to store a vector corresponding to a group of interrupts and a vector corresponding to the particular interrupt; wherein the processor is configured to substitute the vector corresponding to the group of interrupts with the vector corresponding to the particular interrupt and further configured to jump to a service routine corresponding to the particular interrupt (fig.2C and col.2 as noted above). Lai shows all of the elements recited in claim 11.

As for claim 16, the argument for claim 11 applies. Lai also shows that the vectors corresponding to a group of interrupts and the particular interrupt are addresses (col.2). Lai shows all of the elements recited in claim 16.

As for claim 20, the argument for claim 11 applies. Lai also shows that the processor is configured to execute the service routine in order to resolve the particular interrupt (col.2). Lai shows all of the elements recited in claim 20.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1 and 10 have been considered but are moot in view of the new ground(s) of rejection.

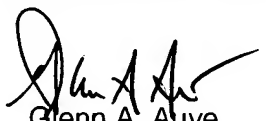
***Conclusion***

4. Claims 5-9,12-15, and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (571) 272-3623. The examiner can normally be reached on M-F 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Glenn A. Auve  
Primary Examiner  
Art Unit 2111